

### **3.1.1 One-Foot Rise Floodway**

The 1-foot rise floodway alternative represents the City of Lincoln's existing floodplain regulation that allows development to occur within the flood fringe up to the 1-foot rise floodway boundary. Figure 3-1 presents a possible residential development layout under this regulation.

As shown in Figure 3-1, the residential development borders to the 1-foot rise floodway boundary. The City's code requires the developed area within the flood fringe to be elevated with fill above the 100-year flood elevation. The fill within the flood fringe eliminates flood storage and reduces the conveyance capacity through this area. Detailed studies have shown that the reduction in floodplain storage can increase peak flow rates downstream resulting in flood damages. This floodplain management alternative also adversely affects the environment by destroying riparian habitat and limits the natural buffer between the stream and developable area. However, this development scenario does maximize developable area (40.5 acres).

The economic analysis for this scenario was based on the layout shown in Figure 3-1, which has a total of 177 parcels. Costs associated with developing the site were evaluated to determine the existing floodplain regulation baseline that would be used to compare the other alternatives. Development cost calculations can be found in Appendix A.